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| 10/670,638      | 09/24/2003  | Andreas Arning       | DE920010081US1      | 6848             |

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| EXAMINER          |  |
|-------------------|--|
| JEAN GILLES, JUDE |  |

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2143     |              |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/670,638

Applicant(s)

ARNING ET AL.

Examiner

Jude J. Jean-Gilles

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This office action is responsive to the Reply filed on 10/12/2007.

### ***Response to Amendment/Arguments***

2. Applicants have amended claims 5, 16, and 27 to correct claim language indefiniteness. Rejection under U.S.C. Par. 112 has been reconsidered and withdrawn by the Examiner.

In the claims, claims 1-33 are pending in this application with independent claims amended to reflect Applicants remarks that the user's related information comprises user's prior sent and/or received email. Claims 1-33 represent "USING A PREDICTION ALGORITHM ON THE ADDRESSEE FIELD IN ELECTRONIC MAIL SYSTEMS".

Applicant's arguments with respect to claims 1-33 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the existing ground of rejection as explained here below. Applicants' amendments to the independent claims are not properly made as to perhaps place the them in condition for allowance.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

3. Applicant's Request for Reconsideration filed on 10/12/2007 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention:

Applicant contends that the present claimed invention uses text mining and data mining methods on several attributes, including the email address as well as several other types of attributes, of the user's prior email and gives weightings to the results of the data mining. This facilitates predicting the intended address of an email based on the content of the email and the prior emailing tendencies of the user who creates the email and, thus, provides an efficient way to identify errors in an email address as well as a new, streamlined way of addressing email. Applicant argues that the prior art of reference does not teach data mining methods to mine the text of the user's prior sent and/or received e-mail in order to find attribute text that can be associated.

The Examiner disagrees with applicants characterization of the prior art in light of the teachings of the invention. In fact, Quine teaches a method for providing and predicting a user's corrected e-mail address. Portion or the entire email address is parsed based on a domain rule format database. Inherently, this process can be done using any of the techniques available including data mining. Text spellings, prediction and correction is provided in checking the addressee' email address. In the process, prior email addresses are used for comparing as the and analyzing the email text based on user' history. (see Quine , abstract, par. 0012-0015, and 0042-0045). In

conclusion, it is the position of the Examiner that Quine in detail teaches the limitations of the above mentioned claims.

Examiner notes that applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 102(e) anticipation rejections applied against the claims, the rejection is therefore sustained.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-33** are rejected under 35 U.S.C. 102(e) as being anticipated by Quine et al (Quine), Pub. No. 2003/0115279 A1.

Regarding **claim 1-33**, Quine discloses:

1. A computerized method for predicting the correct addressee to be filled-in in an addressee field in an e-mail system, whereby user-related history information, including the user's prior sent and/or received e-mail, is analyzed for associating the most probable addressee for an e-mail to be addressed (fig. 5A-B, 6, 7, &9; Note

that inherently, to automatically send the email message to the recipient requires to fill in the addressee field; see (par. 0039-0042; 0065-0075) comprising the steps of: analyzing at least one of the following attributes of said user-related history information and of said e-mail to be addressed:

a subject line of said sent, received, and to-be-addressed e-mail; the length of said sent, received, and to-be-addressed e-mail; the language used in said sent, received, and to-be-addressed e-mail; a time associated with said sent, received, and to-be-addressed e-mail; the vocabulary used in said sent, received, and to-be-addressed e-mail; topics discussed in the body of said sent, received, and to-be-addressed e-mail; the salutation form used in said sent, received, and to-be-addressed e-mail; the closing form used in said sent, received, and to-be-addressed e-mail; whereby Text Mining methods are used to associate attribute values with respective addressees, thus yielding a plurality of single analysis results usable for said prediction (par. 0012-0016; 0065-0075), and weighting the plurality of said single analysis results to provide a Data Mining Model adapted to offer at least one top favorite addressee proposal as a prediction result (par. 0074, 0075, 0092-0095, see fig 9 for statistical analysis).

2. The method according to claim 1, wherein said e-mail system has multiple use modes, further comprising the step of: using separate Data Mining models for different use modes (par. 0065-0075; Note that the sender has the choice of initially finding the closest match the first time around,, or wait if the message is undeliverable, to use the

data Mining Models).

3. The method according to claim 1, further comprising the step of: performing a training of the Data Mining model triggered by any of the following criteria: when a user overwrites the addressee proposal(s) made by the e-mail system, more frequently than limited by a predefined threshold level; when the e-mail system is confronted with a number of new addressees not found in the user-related history information, and the number or fraction thereof is higher than a predefined threshold level; after a predefined time limit has passed (0085-0087).

4. The method according to claim 1, in which the analysis results are generated in a table-like form, in which each attribute to be analyzed is associated with a predicted value, accompanied by a respective confidence value (fig. 9).

5. A computerized method for completing the addressee field in a user-initiated "new mail" within an e-mail system, comprising the steps of: on an occurrence of an incomplete entering of an addressee term in said addressee field, running a predictive Data Mining method based on a trained Data Mining Model developed by: analyzing one or more attribute values of user-related history information, including the user's prior sent/or received e-mail and of said e-mail to be addressed, whereby Text Mining methods are used to associate attribute values with respective addressees, thus yielding a plurality of single analysis results usable for said completing the address field;

and weighting the plurality of single analysis results to provide a Data Mining Model adapted to offer at least one top favorite addressee proposal as an address-completion result; and conveying at least the most probable addressee proposal to the user as an address-completion result (figs. 5 A-B, 6, 7, 9; par. 0065-0075, 0092-0095).

6. The method of claim 5, wherein said analyzing step includes at least the step of analyzing one or more of the following attribute values of said user-related history: a subject line of sent, received, and/or to-be-addressed e-mail; the length of said sent, received, and/or to-be-addressed e-mail; the language used in said sent, received, and/or to-be-addressed e-mail; a time associated with said sent, received, and/or to-be-addressed e-mail; the vocabulary used in said sent, received, and/or to-be-addressed e-mail; topics discussed in the body of said sent, received, and/or to-be-addressed e-mail; the salutation form used in said sent, received, and/or to-be-addressed e-mail; and the closing form used in said sent, received, and/or to-be-addressed e-mail (0065-0075).

7. The method according to claim 5, further comprising the step of: offering a subset of a predefined quantity of top favorite addressee proposals to the user for selection (0066-0071).

8. The method according to claim 5, further comprising the step of automatically providing an addressee field pre-filled with a top favorite addressee term (0065-0075).



9. The method according to claim 5, further comprising the step of testing the Data Mining model on a test set of e-mail, said test set not being used in the attribute-value analyzing step, before predicting the most probable addressee, and issuing a hint to the user, indicating the confidence of the predicted addressee proposal (0065-0075).

10. The method according to claim 5, further comprising the step of: automatically expanding a trunk of an address term with the most probable addressee term, when the trunk of the most probable addressee term is present in the addressee field (0065-0075).

11. The method according to claim 5, further comprising the step of: cross-checking an addressee term entered by the user with a list of top favorite addressees, determined by the system, and issuing a warning, if the probability is high that the user-entered addressee term is faulty (0065-0075).

**claims 12 and 23 are similar to claim 1, and are rejected for the same reason.**

**claims 13 and 24 are similar to claim 2, and are rejected for the same reason.**

**claims 14 and 25 are similar to claim 3, and are rejected for the same reason.**

**claims 15 and 26 are similar to claim 4, and are rejected for the same reason.**

**claims 16 and 27 are similar to claim 5, and are rejected for the same reason.**

**Claims 28 is similar to claim 6, and are rejected for the same reason.**

**claims 18 and 29 are similar to claim 7, and are rejected for the same reason.**

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**claims 19 and 30** are similar to claim 8, and are rejected for the same reason.

**claims 20 and 31** are similar to claim 9, and are rejected for the same reason.

**claims 21 and 32** are similar to claim 10, and are rejected for the same reason.

**claims 22 and 33** are similar to claim 11, and are rejected for the same reason.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3201.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 305-0800.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

December 24, 2007

  
**JOHN FOLLANSBEE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**